

## Full Stack Software Engineer

### CONTRACT - ONE (1) YEAR FIXED TERM CONTRACT

*Location: Cape Town (Hybrid)*

#### About the Organisation

Join the Knowledge Translation Unit (KTU), a pioneering research and knowledge synthesis group committed to strengthening health systems through pragmatic research, evidence-based implementation, and the development of practical clinical tools derived from policies and guidelines. Our work supports primary healthcare delivery across South Africa, sub-Saharan Africa, Brazil, and Indonesia. The team ensures that all guidance is evidence-based, contextually relevant, and designed for adaptability across formats and platforms.

We are seeking a passionate and experienced Full Stack Software Engineer to join our team and contribute to the design, development, and enhancement of scalable digital solutions, including our Learning Management System (LMS) and other innovative web-based projects.

The successful candidate will play a key role in developing secure, scalable, and user-friendly applications, working across multiple initiatives that support learners, educators, healthcare professionals, researchers, and organisational stakeholders through innovative digital solutions.

#### Role Overview

To design, develop, and maintain digital solutions with a focus on scalable, secure, and user-friendly web applications. The role requires full stack software engineering expertise across the entire lifecycle of digital product development, supporting Learning Management Systems (LMS) and other innovation projects that contribute to improved learning, healthcare, and research outcomes.

#### Minimum Requirements:

- Bachelor's Degree or Advanced Diploma in Computer Science, Software Engineering, Information Systems, or equivalent practical experience.
- Minimum of 5 years' experience in full stack software development.
- Proven experience developing, maintaining, or enhancing Learning Management Systems (LMS), EdTech platforms, or large-scale online learning applications.
- Strong proficiency in modern backend technologies such as Node.js, Python, Java, PHP, .NET, or Go.
- Advanced knowledge of SQL databases and database design principles.
- Strong experience with modern frontend frameworks including React, Vue, or Angular.
- Experience designing and consuming RESTful APIs and third-party integrations.
- Experience building scalable cloud-hosted web applications.
- Understanding of secure software development practices and application security principles.
- Experience implementing responsive, accessible, and user-centred interfaces.
- Strong problem-solving, communication, and collaboration skills.
- Ability to manage competing priorities and deliver effectively in fast-paced environments.

### Advantageous:

- Experience working within the education, training, higher education, or e-learning sectors.
- Experience with LMS platforms such as Moodle, Canvas, Blackboard, Thinkific, TalentLMS, or custom-built learning systems.
- Knowledge of SCORM, xAPI, LTI, and other e-learning standards.
- Experience with cloud platforms such as AWS, Azure, or Google Cloud.
- Familiarity with DevOps practices, CI/CD pipelines, Docker, and containerisation technologies.
- Experience integrating video conferencing platforms such as Zoom, Microsoft Teams, or Google Meet.
- Understanding of learning analytics, learner engagement tracking, and reporting systems.
- Knowledge of AI-powered learning tools, recommendation engines, or personalised learning technologies.
- Exposure to UI/UX design principles and learner-centred product development.

### Key responsibilities:

- Design, develop, and maintain scalable and secure LMS applications and digital learning platforms.
- Participate in the complete software development lifecycle from concept and architecture through deployment and support.
- Collaborate with instructional designers, educators, product owners, and stakeholders to develop innovative digital learning solutions.
- Develop and maintain frontend and backend functionality for learner, instructor, and administrator portals.
- Design and implement APIs, integrations, and third-party educational services.
- Build and optimise database structures to support platform performance and reporting requirements.
- Ensure software quality through testing, code reviews, documentation, and engineering best practices.
- Monitor, troubleshoot, and enhance existing systems to improve performance, reliability, and user experience.
- Implement secure development practices and proactively identify technical risks.
- Research and recommend emerging technologies that enhance digital learning outcomes.
- Contribute to continuous improvement initiatives and mentor junior developers where appropriate.
- Stay informed of emerging trends in educational technology, software engineering, and digital learning innovation.

### How to Apply

Email your application to [KTU-HR@uct.ac.za](mailto:KTU-HR@uct.ac.za) with the subject line: **Data Engineer June 2026 – Closing Date: 15 June 2026**

#### Attach:

- CV
- Motivation letter
- Certified copy of highest qualification
- Contact details for **two or three** current, contactable referees

### Important Notes

- Incomplete applications will not be considered.
- Only applicants who have completed all application requirements will be considered.
- KTU is committed to employment equity and strives to appoint candidates in line with its equity objectives.
- The organisation reserves the right not to make an appointment should no suitable candidate be identified.
- Only shortlisted candidates will be contacted

#### Our Vision

To improve the quality of primary healthcare for underserved communities through pragmatic research, evidence-based implementation, evaluation, and engagement of health systems, their planners, providers, and communities.

For more information about the organisation, visit: [www.knowledgetranslation.co.za](http://www.knowledgetranslation.co.za)